

MR1115-381
S.N. 10/082,321

Amendment dated 24 September 2003
Reply to Office Action of 27 May 2003

REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Official Action dated 27 May 2003. Responsive to the rejections made in the Official Action, Claim 6 has been amended to clarify the combination of method steps which forms the invention of the subject Patent Application. Additionally, Claims 1-5 and 11 have been cancelled by this Amendment.

In the Official Action, the Examiner objected to the drawings under MPEP § 608.02(g), because those Figures should be designated by the legend “PRIOR ART”.

Accordingly, a replacement sheet containing FIGS. 6 and 7 has been provided with the legend --PRIOR ART-- added thereto.

In the Official Action, the Examiner rejected Claims 6 and 9-11 under 35 U.S.C. § 103, as being unpatentable over Jie, et al., U.S. Patent #6,498,635. The Examiner states that the reference discloses steps 2-4, but does not appear to have a substrate for each of at least two micro-displays. However, the Examiner concludes that since the reference discloses a method for forming spacer posts on micro-displays, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jie, et al. to have a substrate for each micro-display. The Examiner further states that the spacers of the substrate shown in the reference are staggered and can correspond to various regions on a

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given substrate. It is respectfully submitted that the invention of the subject Patent Application as now claimed, is directed to a method for forming spacers on at least micro-displays. The steps of the method include providing a substrate for each of at least two micro-displays with reflective pads formed on each substrate. The pads are spaced from each other by non-reflective areas. Each of the micro-displays is associated with a different color whose light emissions together form a color image. The method includes the step of forming a coating of transparent, non-conductive material on each substrate over the reflective pads formed thereon. The method includes the step of providing a mask associated with each substrate. Each mask comprises a number of shielded zones corresponding to predetermined non-reflective areas of a respective substrate. Each of the shielded zones of one mask is at different locations than the shielded zones of another mask. The method further includes the step of performing a lithographic operation on the transparent, non-conductive coating of each substrate of step (2) by using the associated mask of step (3) whereby portions of the transparent, non-conductive material of each substrate corresponding to the shielded zones of the mask associated therewith are left on the substrate and function as spacers. The spacers of any one substrate are not in a location corresponding to the spacers of another substrate. By that arrangement, the color image produced by light emission from the plurality of micro-displays is devoid of dark or white spots on the

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background of the image that otherwise would result by the superposition of images of the spacers on the plurality of micro-displays.

In contradistinction, the Jie, et al. reference is directed to a method of forming insulating material alignment posts associated with active structures. While the alignment posts 15, formed of silicon nitride, are disposed at locations between a portion of the adjacent pixels 30, the reference neither discloses nor suggests locating the alignment posts on any one given substrate different from those of another substrate.

The mere fact that a worker in the art could rearrange the elements of the reference device to meet the terms of the Claim is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of Applicants' Specification, to make the necessary changes in the referenced device. See Ex parte Chicago Rawhide Manufacturing Co., 223 USPQ 351 (Court of Appeals 1984). The Examiner has presented no such evidence to support the conclusion that a worker in the art would have had any such motivation. As the reference does not recognize the problem solved by the invention of the subject Patent Application, it therefore cannot be said to provide a motivation for making obvious Applicants' solution to the problem.

None of the known prior art discloses or suggests the step of providing a mask

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associated with each substrate, each mask comprising a number of shielded zones corresponding to predetermined non-reflective areas of a respective substrate, each of the shielded zones of one mask being at different locations than the shielded zones of another mask. That novel step resulting in the spacers of any one substrate not being in a location corresponding to spacers of another substrate. Thus, neither Jie, et al., alone, or in combination with Tsuboyama, et al., U.S. Patent #4,775,225, can make obvious the invention of the subject Patent Application, as now claimed. It is respectfully submitted that the Claims dependent on Claim 6 are patentably distinct for at least the same reasons as the independent Claim, and thus should also be allowable.

It is now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectfully requested.

Respectfully submitted,
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